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Indiana State Teachers College
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THE TEACHERS COLLEGE JOURNAL

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THE JULY COVER

Miss Elaine Thompson of Terre Haute and Mr. Gene Nutt of Indianapolis posed for the picture on this month's cover, which was taken in the drawing room of the Condit home. This house, which has become surrounded by the campus of Indiana State, was built in 1860, and its interior and exterior both remain pretty much the same as they were seventy-five years ago when the College was founded.

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Indiana State Teachers College--- Its Past and Future

Clement T. Malan

Dr. Malan, Indiana State Superintendent of Public Instruction, delivered these greetings at the opening convocation on June 15.

I consider it a high privilege and a great honor to be permitted to share with you on this occasion in doing honor to those to whom honor is due. We have met here today to celebrate seventy-five years of achievements.

The driver of an automobile going down the highway looks through the chauffeur's mirror with one eye in order that he may see the past, and looks forward with the other eye in order that he may see what is ahead, and then steers his course intelligently as he proceeds forward.

Today as we are looking through the chauffeur's mirror of time of seventy-five years, and scan the past, we see an institution founded on the Wabash at a time when we had no improved roads, merely mud roads, no automobiles, no airplanes, no electric lights, no compulsory school system in Indiana; in fact, none of the conveniences with which we are surrounded here on this festive occasion. Yet this institution has come up from that early beginning and has made its great contribution to the moral, intellectual, spiritual, and occupational development which we have at the present time.

It is interesting to note that seventy-five years ago the people of the State of Indiana generally could not tax themselves to educate their children although the people of Greencastle, Indiana, decided to tax themselves to educate their children ninety years ago. A certain Mr. Black brought suit in the Putnam County Circuit Court against the school board, and the

judge held that the people could not tax themselves to educate their children. The case was taken to the Supreme Court of the State of Indiana, and the Supreme Court, concurring in the opinion of the lower court, held unanimously that the people of Greencastle could not tax themselves to educate their children.

Thirty years later, or sixty years

Teacher Education: An Introduction

Each July, in addition to the index and abstracts of Masters' theses, the JOURNAL features the outstanding addresses delivered on the campus of Indiana State during the commencement activities. However, this year it is impossible to publish all of the addresses which were submitted and recorded. Since Indiana State celebrates her seventy-fifth anniversary this year, outstanding educators from all parts of the country participated in her jubilee program. Because of limited space in this number, we hope to publish other papers in an early forthcoming issue.

With the exception of the paper by Dr. Cox, all of the remaining articles are by members of a panel which discussed the Bigelow Commission on Teacher Education. Each member of the panel discussed one of the several books which were an outgrowth of the Commission's study, and we believe that by publishing their remarks, more people in all branches of the teaching profession will become acquainted with the results of this extensive survey.

ago, in the case of Robinson vs. Shank, the Supreme Court reversed the earlier decision and held unanimously that the people could tax themselves to educate their children. That was fifteen years after this institution was founded. A compulsory education law was passed five years later, providing for the education of childhood. But not until 1907, for the first time in Indiana, was provision made for compulsory high-school education of all youth to the age of sixteen years.

What has happened in these last fifty-five years since we have had compulsory education in Indiana? Briefly, let us look at the present picture. Two illustrations will suffice. Tax payers of Indiana appropriate a little over \$62,000,000 each year in Indiana for current expenditures in the grades and high schools. Almost \$7,000,000 is appropriated for the state institutions, namely: Indiana State Teachers College, Ball State Teachers College, Indiana and Purdue Universities.

This is the impressive story of fifty-five years of achievement, by the public schools of Indiana.

Our school busses travel one hundred eighty-three thousand miles every school day in Indiana, hauling approximately two hundred thirty-five thousand children to the public schools. That too, is an impressive story. Many other illustrations could be given of the development of our educational system, of which this institution has been a part, and to which this institution has contributed in a large way in the seventy-five years of its history.

This institution has left its influence not only on Terre Haute and Vigo County, but it has left its influence on the entire State of Indiana, and upon the United States, and upon every nation in the world if you please. In fact, its sons at the present time in every quarter of the globe are carrying the spirit, the intelligence, the ideas and ideals to the lands from whence our ancestors came, and to the benighted peoples of the seven

(Continued on page 151)

Recent Advances in Virus and Rickettsial Research

Herald R. Cox

Dr. Cox, Director of Lederle Laboratories at Pearl River, New York, graduated from Indiana State in 1928, after completing the five-year course in four years. He attended Johns Hopkins with a scholarship and fellowship, and was the first student to graduate from the filtrable virus course. Since that time he has become world-famous through his discoveries and production of vaccines for Rocky Mountain spotted fever, typhus, scrub typhus, influenza, and sleeping sickness. Indiana State is proud to have had a share in the training of such a man.

Dr. Cox delivered the following address at the Alumni-Senior Dinner on Saturday, June sixteenth.

It is indeed an honor for me to be with you here tonight and I hope that the few remarks that I have to say will prove both interesting and stimulating in their contents. It is rather difficult to know what to speak about on an occasion like this, but I thought that you might be interested in hearing something about typhus fever and its related diseases in which I have been interested for the past nine years, and which has been the subject of a great deal of my research.

Typhus fever is recognized as one of the five great epidemic diseases that has plagued man for centuries past. The other four great epidemic diseases being cholera, bubonic plague, small pox, and yellow fever. Cholera and bubonic plague are classified as infectious agents bacterial in nature. Small pox and yellow fever are what we call filtrable virus infections while typhus fever is classified as a rickettsial disease. I may define briefly these disease-producing agents so that one may gain a rough idea as to their properties.

Bacteria are recognized as single-celled disease producing agents which are visible with the ordinary microscope, that may be cultivated in the presence of artificial media, and that, as a rule, do not pass the ordinary types of filters used in sterility procedures.

Filtrable viruses may be defined as the midgets of microbes and they include a great number of diseases which affect man and practically all known animals and plants. The viruses are disease-producing agents so small that they can not be seen with the ordinary microscope. They can not be cultivated on artificial media but require the presence of living cells and, quite often highly specialized cells, for their growth and reproduction. As a rule viruses will readily pass filters that retain the ordinary types of bacteria. Rickettsial agents occupy a position intermediate between bacteria and viruses and show properties that overlap each of the other two.

Rickettsiae may be defined as infectious agents which are transmitted to man by the bite of insect vectors. They resemble bacteria in that they are, in most cases, visible with the ordinary microscope and are retained by filters that hold back bacteria. The exception to this rule is the rickettsia of American Q fever, which does exist in forms too small to be recognized with aid of the microscope and which readily pass bacteria-retaining filters. On the other hand, rickettsiae resemble viruses in that up to the present time rickettsiae have not been cultivated on artificial media but require the presence of living cells for their growth. The term rick-

ettsiae was applied to this group of infectious agents in 1916 by the Brazilian worker, Da Rocha-Lima, in honor of the American bacteriologist, Howard Taylor Ricketts, who died in Mexico City in 1910, of typhus fever while engaged in a study of this disease.

At the present time four main groups of rickettsial infections are recognized. These are the typhus fever group, the Rocky Mountain spotted fever group, the scrub typhus or tsutsugamushi disease group, and the Q fever group. As mentioned before, all of these diseases are transmitted to man by the bite of insect vectors and all have very high mortality rates in the infected individuals. The typhus fever group may be subdivided into two groups known as the epidemic or louse-borne type and endemic, murine, or rat flea type. I shall describe the typhus group more fully a little later on.

Rocky Mountain spotted fever is transmitted to man by the bite of ticks, and, as one knows, is found widespread throughout the United States, both in the Rocky Mountain area of the west and along the Appalachian Plateau in the east. As a matter of fact, the disease is so widespread that forty-two of the forty-eight states in the Union have reported cases of Rocky Mountain spotted fever in their areas. This disease is also known to occur in Mexico, Brazil, Peru, Colombia, and Ecuador, and in highland areas of northern India, southern China, and quite possibly in the highland areas of South Africa.

Scrub typhus, tsutsugamushi disease, or Japanese river fever is transmitted to man by the bite of mites or chiggers. This disease occurs in Japan, eastern China, Malaya, Burma, northeast India, northeast Australia, and throughout the island areas of the South Pacific, such as New Guinea, Sumatra, and Borneo. This disease, incidentally, is of prime military importance to us at the present time because of its high incidence in our troops stationed in these areas.

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Q fever was discovered independently at about the same time by Dr. Burnet of Australia and by myself while I was located in Montana. This disease is transmitted to man by the bite of ticks, and while we know that it occurs in northeastern Australia and in a few of our western states in the Rocky Mountain area, we do not yet know where else in the world it may occur. However, it is rather difficult to believe that the disease should not exist elsewhere.

Getting back to our main theme of typhus fever—the type of disease which has been the cause of great epidemics in the world for centuries past is that which is transmitted to man by the bite of the human body louse. This disease is known to occur primarily in countries located in a temperate climate or in areas of high altitude so that temperate climatic conditions prevail. It is found chiefly in eastern Europe and the Balkan areas; in North Africa and the highland areas of central Africa; the mountainous areas of Mexico and the South American countries, such as Brazil, Colombia, Peru, and Ecuador; and is recognized to be existent in parts of Manchuria, west China, Tibet, and north India.

That form of Typhus called endemic or murine typhus, because its natural reservoir is in rats and because it is transmitted to man by the bite of rat fleas, has become recognized within the past few years. This disease occurs rather extensively in the southern United States, particularly in those states along the eastern seaboard and bordering the Gulf of Mexico. It is also known to occur in the lowland areas of Mexico, the Mediterranean regions of Europe, Africa, and Asia, and along the coastal areas of Japan and China.

Rickettsial diseases show features in common in that they are diseases primarily affecting the lining cells of blood vessel walls and by their destructive action produce characteristic and distinctive rashes in the affected host. In the case of typhus the disease exerts its effect throughout the body, but greatest damage is found in the

skin, heart, great blood vessels, kidneys, adrenals, and especially the brain where the cerebral cortex is markedly involved. The severity of typhus fever varies considerably, but a typical case presents characteristic features. After an incubation period of seven to twenty-one days, most commonly eight to twelve, the onset is sudden with painful stiffness of the muscles of the back of the neck, generalized muscular pains, headache, and fever. The fever rises steadily during the succeeding days, attaining its maximum about the third to seventh day, when the temperature may be as high as 105°F. Thereafter, in a typical severe case, it remains more or less continuous with only slight morning remissions, until about the fourteenth day, when it falls by rapid lysis, or more rarely by crisis.

At the beginning and end of epidemics, the death rate is usually fifteen to twenty per cent, but the rate of mortality may run much higher. Thus the mortality rate of the great Serbian epidemic of 1915, ran as high as seventy per cent.

In children, typhus fever is usually a mild disease and the mortality rate as a rule does not exceed five per cent. Young adults, although often appearing to be severely ill, generally recover, but with increasing age, the outlook progressively gets worse. In people over fifty years of age, the mortality rate is over fifty per cent; and nearly all patients over sixty years of age die.

HISTORY OF TYPHUS

The history of typhus is written in those dark pages of the world's history which tell of the grievous visitations of mankind by war, famine, and misery of every kind. In every age as far back as the historical inquirer can follow the disease at all, typhus is met with in association with the saddest misfortunes of the populace.

From the writings of Corradi we know that typhus fever was epidemic in Italy as early as 1505, and from there it spread over the rest of Europe.

In 1557, it became known in Spain under the name of *el tabardillo*,

which means red cloak and is descriptive of the rash produced on the patient's body; and in this country there were many repeated epidemics.

One of the earliest really decisive typhus epidemics was that which dispersed the army of Maximilian II of Germany, in 1566, who was preparing with 80,000 men to face the Turks, who had already overrun Hungary. From the infected army the disease spread throughout the surrounding country, and Maximilian was forced to abandon his campaign and make an unfavorable peace with the Turks. The infected troops scattered to all parts of Europe, carrying the disease with them into Italy, Bohemia, and Germany, thence into France, through Burgundy, and northward into Belgium. Whenever little spots of infection occurred in towns, epidemics resulted. Vienna suffered the most severe typhus outbreak in its history. Ever since that time typhus has remained endemic in Hungary, the Balkan States, and the adjoining territories of Poland and Russia. These are still at the present time the "home stations" from which modern, European epidemics originate.

In a third epidemic in Italy in the second half of the sixteenth century, typhus is said to have killed more than one million people in Tuscany alone. In the seventeenth century typhus was again one of the diseases which caused the greatest mortality. So great were the miseries engendered by it and by the other events in connection with the Thirty Years' War, that Haeser, writing of this period with reference to districts formerly well populated, says that one could wander for miles without seeing a living soul, only dead bodies decomposing and partially devoured by wolves, dogs, and vultures, for want of a decent burial. Towards the close of this century Morton implies that practically every hospital in England was filled with typhus victims. The eighteenth century saw no abatement of typhus epidemics, and there is scarcely a year during this century that one

may not find references to epidemics of it.

The wars of the Spanish, Polish, and Austrian successions, all of which occurred in the first half of the eighteenth century, provided all the old opportunities never overlooked by typhus. In all of these wars, typhus epidemics, started in the armies, spread all through central Europe. At the Siege of Prague alone, 30,000 people — including all of the French medical staff — died. Another wave during this period swept through Scandinavia, probably via Russia, and crossed into Germany. A little later it appeared with deadly violence in Paris and spread into all the provinces of France and into Belgium and Holland.

The Seven Years' War, the French Revolution, and the Napoleonic campaigns in Europe and in Spain were all more destructive of life by typhus than by the power of cannon, rifle, or bayonet. Toward the end of the eighteenth century and the beginning of the nineteenth, England, which had been relatively spared by typhus during the Continental wars, was seriously invaded. As the Continental epidemics began to decline, toward 1798, the infection re-entered England, probably from Ireland, where poor crops and famine had again given typhus its opening. The succeeding two decades were typhus years in both islands. The disease reached its culmination in Ireland in 1816 to 1819, during which it is recorded there were no less than 700,000 cases among the six million inhabitants. Ireland was again terribly hit in the years 1846 and 1847 when out of a total population of seven million, it was estimated that one million had typhus. In Dublin alone there were at least 60,000 cases of the disease. Osler states that in the thirty-year period from 1816 to 1847, 550 out of a total of 1230 Irish doctors died of typhus.

Typhus also prevailed in certain centers of the United States and Canada during the early years of the nineteenth century, and there were severe epidemics following the Irish

immigrations in 1846 and 1847.

In South America, typhus was imported probably from Spain to Peru at a very early period where it was well known under the Spanish name of *tabardillo*. It also prevailed in Chile at the same period.

Undoubtedly the greatest epidemic of typhus of modern times occurred during the last great war. The disease first appeared in Serbia in November, 1914, and reached its peak of incidence during April, 1915. For a time as many as 2500 cases were admitted daily to the military hospitals alone. The mortality ranged from approximately twenty per cent during the rise and decline to sixty and even seventy per cent at the height of the epidemic. In less than six months, more than 150,000 Serbians died of typhus. Of a total of 350 Serbian doctors at the start of the war, 126 died from typhus and no less than half of 70,000 Austrian prisoners succumbed to the disease.

During all this time, Serbia was practically helpless. Yet Austria did not dare attack. Austrian strategists knew better than to enter Serbia at such a time. The probable results were obvious — typhus, while scourging the Serbian population, was holding the border. The Central Powers lost six months during the most critical time of the war, and this undoubtedly helped the Allies to establish a southern front in the Balkans.

In Russia also, typhus again attained its mediæval ascendancy. During the first year of the war, only about 100,000 cases of typhus occurred in Russia. After the retreat of 1916 the number of cases rose to 160,000. From 1917 to 1921, Russia endured a terrible epidemic of typhus and from conservative calculations it has been estimated that there were more than twenty-five million cases with some two and one half to three million deaths.

SCIENTIFIC INVESTIGATIONS ON TYPHUS

Until 1908, medical men of the world were at a loss in knowing how to combat this disease. In that year

the French workers, Nicolle, Comte, and Conseil, first demonstrated that typhus was transmitted to man by the human body louse. This work was confirmed in the following year when the American investigators, Rickets and Wilder, in their experiments in Mexico, definitely showed that body lice were the transmitting agents and furthermore demonstrated the causative organisms in the blood of infected patients. The following year, 1911, Nicolle discovered that the guinea pig is a suitable animal for experimental work and thus opened up the possibility for laboratory research on the infection. Since then, great numbers of investigators, too numerous to mention, have studied the disease and attempted to find methods for controlling it. I will skip over the early work because most of it was not successful. However, I do wish to point out that of all the diseases studied, typhus probably has taken the greatest toll in death of the many men who have worked on it.

As an attack of typhus results in an immunity of solid and long duration, it was to be expected somewhat similar results should be obtained by the use of killed typhus vaccine. However, until quite recently the causative agent or rickettsia of typhus could not be cultivated in sufficient quantities to make a satisfactory vaccine. This difficulty, however, has been overcome in various ways. As no killed rickettsial vaccine was effective at the time, various workers, particularly French workers in North Africa, developed a living vaccine, utilizing murine strains of virus that had been propagated in guinea pig brain tissue. These vaccines were used on a fairly large scale in North Africa and good results were claimed following their administration, but living vaccines are potentially dangerous. This fact was born out in Chile, where out of approximately two hundred physicians and medical students vaccinated with living murine strains, over thirty suffered from severe attacks of Typhus Fever and six died. A happening of this sort naturally discredited the use of living vaccines.

Weigl of Poland, in 1920, developed a very ingenious method of producing typhus vaccine. Weigl inoculated lice intrarectally with the aid of a very fine glass pipette, utilizing the microscope, of course. The lice thus inoculated were allowed to feed on typhus-immune individuals because human blood is necessary for the growth of typhus organisms in the gut of the louse. It was necessary to use immune individuals for the louse feeding, because non-immune persons would undoubtedly contract typhus. When the rickettsiae had reached their optimal concentration in the tissues of the gut, the lice were eviscerated and the typhus laden tissues ground up in a solution of phenol-saline to inactivate the organisms. It was found that suspensions containing the equivalent of three hundred to four hundred lice would immunize a single individual and a laboratory was established in Poland for the production of such a vaccine. Naturally, it is obvious that even though a large staff of workers was employed in making this vaccine, only minimal amounts of such a vaccine could be produced and the vaccine, therefore, was used primarily to immunize those persons exceptionally exposed to typhus such as doctors, nurses, and other hospital personnel. To make the story complete, I might state that Dyer, of the United States Public Health Service, developed a vaccine for murine typhus, which was similar to Weigl's vaccine in all details except that Dyer substituted rat fleas for body lice in the preparations of his vaccine. Zinnser, late Professor of Bacteriology at Harvard University, made several attempts to solve the problem by using infected tissues of animals treated in such a way as to make them highly susceptible to typhus. None of these methods were applicable, however, to the large-scale production of vaccine.

In 1939, Castaneda of Mexico and Giroud of the Pasteur Institute in France, independently discovered the fact that when white mice or rabbits are infected intranasally with typhus

suspensions, the animals developed a rickettsial pneumonia and the infected lung tissues could be used to produce killed vaccines.

At about the same time (in 1938) while working at the Rocky Mountain Laboratory of the United States Public Health Service, located in Hamilton, Montana, I found that the yolk sac membrane of the developing chick embryo provided exceptionally fine medium for the growth not only of typhus, but also of all the other rickettsial agents. The yolk sac method of cultivating the rickettsial agents of typhus and Rocky Mountain spotted fever offered possibilities heretofore never realized for the production of killed vaccines in practically unlimited quantities. The technique of preparing such vaccines is comparatively simple in that all that is needed are fertile hen's eggs incubated for six or seven days. The injections are made directly into the interior of the egg by means of a hypodermic syringe equipped with a needle approximately one inch long. After inoculation, the eggs are put back into incubators for periods of five to seven days, at which time the rickettsiae reach their optimal growth. The yolk sac membrane alone is utilized for the production of vaccine. Each egg yields approximately two grams of tissue.

Since the resulting vaccine consists of a ten per cent suspension of the tissue by weight, it is evident that approximately twenty cubic centimeters of vaccine, or enough to immunize six or seven individuals, can be prepared from a single egg (each individual receives three injections of one cubic centimeter each at a five-to seven-day interval).

During the past few years, the basic vaccine has been considerably improved through researches of my own as well as of others, and it has been produced in tremendous quantities by all of the biological houses in the United States and by other laboratories located in Canada and South Africa.

This type of vaccine was adopted for the immunization of all troops by

the American, Canadian, British, South African, and Australian governments; and all indications are that it has proven to be an effective immunizing agent. Information is that although our troops have had unusual exposure to typhus in some areas, particularly in North Africa and Naples, Italy, less than twenty-five cases of typhus fever were reported in American troops. All of the cases showed an extremely mild course of the disease and not a single fatality resulted. These results, which have surpassed our fondest hopes, are most gratifying and certainly indicate that the typhus vaccine did a good job.

I might go a bit further and add that the Lederle Laboratories, with whom I am now affiliated, have used approximately 8,500 to 10,000 eggs a day, five days a week, for the past four years in the production of typhus vaccine for the Armed Forces. At least five other laboratories in addition to Lederle were engaged in making this product. This gives one an indication of the size of but a single job of many that the biological laboratories have been doing during this war to safeguard our troops against the diseases which always accompany war.

The method developed for the production of typhus vaccine from fertile hen's eggs is also being used for the production of Rocky Mountain spotted fever vaccine and anti-serum and could readily be used for the production of Q fever vaccine.

I may add that at the present time, by special request of the United States of America Typhus Commission, we are engaged in a great deal of research in an effort to produce a satisfactory vaccine against scrub typhus or tsutsugamushi disease that is of so much importance to our troops operating in the Pacific theater of war. We feel that recently we have obtained encouraging results, and we hope that soon we will be able to produce a satisfactory immunizing vaccine against this latter disease.

Teacher Education in Service

Alfred L. Crabb

Dr. Crabb opened the discussion of the Bigelow Commission on Teacher Education by reviewing one of its resulting reports, TEACHER EDUCATION IN SERVICE. Dr. Crabb is Professor of Education at George Peabody College for Teachers.

The consciousness of the honor of appearing upon this program is particularly warming. This College, I think, is my professional grandmother. When I first gave thought to the ways of teaching, it was in an institution whose pedagogical patterns were cut in these halls and rooms. It was indeed a part of teaching there to quote Parsons or Sandison, or to hal-low some pronouncement by an excerpt from Arnold Tompkins. We wondered some at the accents of Dr. Stickles, which were a trifle acute for the shallow North which was Indiana, but he taught history with a burning zeal that would not be denied. Then, there was Miss Laura Frazee, small, bright-eyed, quick of movement and thought, interpreter and missionary of the mystical but compelling philosophy of Sandison. There was Dr. Kinnaman whose eyes blinked merrily throughout life and whose teaching of psychology had the power of Terre Haute and the direction of G. Stanley Hall. There was Dr. Mutchler, tall and thin and with a face as mobile as any action. He was without a doubt the pioneer of biology in southern Kentucky.

One who reviews a book must find some fault. That isn't bad in itself because practically all books lend themselves to that imperative of the reviewers. I shall, to begin with, find my fault with this book and get it out of the way.

It is not a unique fault. It is the fault of a great many books written in the field of education, indeed in other fields. Since William James, very few

authors in the field have manifested any particular eagerness to make their books readable. It is here and now submitted that they ought to be readable, but that they tend to defeat the mission which they are written to

It is appropriate at this Diamond Jubilee of a famous old teachers college that a panel discussion be devoted to the reports of the Bigelow Commission on Teacher Education. Indiana State Teachers College, during its crowded three quarters of a century, has marked many significant changes in the philosophy and practice of teacher education and has itself pioneered in doctrine and procedure. Today it is not only looking back over the years but it is also preparing to play a dynamic role in teacher education in the years ahead.

No development in recent years matches in importance the effort made by the American Council on Education through the Bigelow Commission to study the best things being done in teacher education and the best ways of bringing about desirable changes. To discuss the implication of these reports and their likely effects upon this college and other colleges engaged in teacher education, we have assembled for this panel a representative and distinguished group of educators. They come from widely separated sections of the country and speak from the points of view of both teachers college and university. They include executives and professors. Some of them have worked closely with the Commission; all have watched with mounting interest the most far-reaching exploration of and experiments on teacher education during our era.

— J. E. GRINNELL

serve by a sort of literary heaviness and dreariness. This book in considerable degree commits that fault. It is not easy to read; in fact, it requires a continuity of effort — which this reviewer suggests need not to have been the case. Its audience has been and will remain all too limited, and there is all too little professional uplift in its pages. The inspirational writer and speaker a generation or so ago held his audience, but then when he had departed so had his speech. That same audience that had cheered so loudly wondered what it had got out of it, and out of that wonder grew revolt. So we tended to throw the baby of inspiration out together with the bath water of lovely verbiage. The inspirational speaker and book went under taboo, and the speaker and book whose content was merely a dreary sequence of factuality emerged. It was then, for instance, that the read address began to perform its function in the field of insomnia.

The book is based soundly. It is experience. Of course, experience is a noble teacher. In fact, what other teacher do we have than our experience, ours and others. Those organizations which we so lyrically refer to as our minds exist mainly to extract from experience its better parts, and to organize them into unity and availability. That is the way it should be, but it must be admitted that at times experience deserves a low instructional rating. There is the classic instance of the college teacher who protested the decision of his president not to give him a coveted advancement.

"I have had twenty-five years of experience," he argued.

"No," answered the president sadly, "you have had one year of experience twenty-five times."

The book is soundly based. It attempts to present the varied experiences of several types of public-school systems bound together in co-operative study. These effects and experiences are not required to fit into any conventional standard and prearranged conception. They range outward from the common hub of pedagogical truths according to the vari-

ous educational beliefs involved. The discoveries of their experiences are their own. If one may carry the figure further, at times some parts of the binding rim seem to be missing, but enough are there to hold all in the state of unity.

This is an account of pooling, interpretation, and evaluation of experience by the teachers of fourteen school systems — though it should be mentioned that several of the fourteen were clusters of systems rather than individual administrative units. The book ends hopefully though with a proper display of scholarly restraint. It leaves the road to the educational millenium still unpaved. However, it identifies clearly the emergence of good from the co-operative effort of teachers. While their experiences are still reasonably fresh they are more resolvable into use.

That is indisputably true. Experience is not at its best at the moment it is enacted. The emotions are not dependable enough for that and our first intentions lack the sense which reflection can give. On the other hand, experiences long removed tend to flow off in vague generalities, usually with a heavy romantic content.

So then in the co-operative efforts recorded in the book, the teachers come together long enough after the experience for sense to have chastened it, but not so long that time will have left it obscure. The procedure is definitely akin to the modern educational workshop whose prevalence in the land is one of the most remarkable of our current educational phenomena.

The very conception of democracy seems to have imposed upon us co-operative effort, the forum, the round table, those other centers of give and take, of compromise, of formulation, of the consensus. Democracy has become rather vividly social.

But the promoters of democracy must never forget that the great and compelling ideas of the world were born in solitude. The Wilderness must always precede the Multitude on the Mount. It is true that those ideas were impotent until they were fitted into the whole social scope, but

all the co-operative efforts in the world, all the workshops, all the conferences, will not of themselves give birth to man's dominant ideas. Those are born, if at all, before the forum convenes. The forum may and will reshape them, but unless he has them already, the forum, or by the same token, the committee, will labor in vain.

The idea of independence which was so exciting in that summer of 1776 was not born in the convention. There the signers disciplined the idea, and so gave it to the generations. But they were chosen to go to Philadelphia because they already had the ideas. Dominant ideas are inherent in man's upward movement. Where they come from, how they form and emerge provoke philosophical wars. Without them all progress would be paralyzed. But even with them the ultimate availability of their good and power rests with the multitude who never have dominant ideas, but who must accept them. Mr. Walter Lippman, with the dramatic pungency which he so often employs, once said, "The real law in the modern state is the multitude of little decisions made daily by millions of men." Those little decisions are, it seems, the gradual approach of the multitude toward the acceptance of the dominating ideas of the leaders.

Most happily the fourteen systems were not unduly cramped for time. It was one of those projects in scientific research that in three weeks or six months reveal enduring truth. It gave itself time. In fact, there was a most commendable show of leisureliness in their industry, though perhaps really those who participated had the feel of hectic speed. They tended to work in large groups in the development of the larger principles, and then when these began to crack under the impact of specific issues, they dissolved into sizes smaller and more wieldy. They came into the councils with eagerness and with a more favoring resource in ideas than might be expected. They warmed (at least part of them) with discussions of dictators and democracies, of tax budgets and teachers' sal-

aries. Inevitably they got around to the democratic way of life. Some of the less regenerate would intrude the paleontological topic of discipline. A little discipline goes a long way in the modern workshop; so presently the discussion would be shifted gently to the politer issue of the curriculum. The current conception of the curriculum is a very remarkable phenomenon. We assumed that it was handed down until Benjamin Franklin, or President Eliot, or Professor Bobbit, or Professor Harap, or somebody discovered that it wasn't. Handed down or not, we simply had to have a curriculum; so a great many thousands of teachers with diverse and sundry assistance have been spending a great many million man hours in the business of rediscovering it. For the curriculum, since it must always be a symbol of epitome of human evolution, can never itself reach completion. The perfect curriculum can never be discovered. It must always be being discovered. The concern of the workshops and conference groups for the curriculum is fully justified. The stuff of the classrooms must always be the better parts of the race's heritage, and since that heritage is always accumulating, always flowing together, always readjusting, the curriculum must never fall behind. It must move along with the ever broadening stream of that heritage. Or, to put it another way, the curriculum should be the proper meeting place for man's past and present. The study of the curriculum by teachers is then their further induction into the story of man's record and mission. That would involve understanding, choice, the placement of values — which is indeed the essence of education. All of the issues studied, we think, yielded profit, first to those who brought ideas to the forum; then, in the true democratic way, gradually reaching the rank and file by whose ultimate ratification, as Mr. Lippman suggested, are written into our major laws and principles.

Perhaps the major discovery made, so the book affirms, is that teachers
(Continued on page 141)

Toward Community Understanding

Harlan H. Miller

Professor Miller of New Jersey State Teachers College at Trenton has given his views of the report, TOWARD COMMUNITY UNDERSTANDING.

Toward Community Understanding, the modest volume I have been asked to review, had its inception, quite innocently, from the desire of a Stanford professor to rethink and enliven a course in educational sociology. He went to the Chicago Workshop and there found four other interested schools. A miniature co-operative study group was formed, and a revised course including out-of-class activities, field trips, and other forms of direct experience resulted. Others became interested, but the Commission on Teacher Education lacked funds for a comprehensive collaboration center. They did, however, finance a modest investigation in the winter of 1942 on this topic. Sociologist Dr. Gordon Blackwell, Associate in Research in Social Studies at the University of North Carolina, was engaged to do the field work and reporting. This little volume is the product.

Dr. Blackwell visited sixteen colleges; four had participated in the Chicago co-operative work. The bases for the other selections were geographic considerations, limitations of time, and a desire for variety in sampling. No doubt many schools omitted could submit good work along school-community lines.

One might be interested to know that the Midwest lists eight of these sixteen colleges; Michigan alone claims three, among which is President Baker's school; the South, five; New York, one; and the two small

colleges of Goddard and Bennington in Vermont. All told, seven are teachers colleges; seven are colleges or universities with education departments; and the remaining two are those in Vermont.

A point has already made itself, namely, the sparsity of educational institutions with commendable programs of inducting student teachers into realistic community understanding. This may be interesting in that the word "social" is one of the over-worked words in educational phraseology.

But more specifically, what did Dr. Blackwell find?

I. First, he found very comprehensive courses related to the community in three schools, namely, Chicago Teachers College, the Wisconsin State Teachers College at Milwaukee, and Ohio State College of Education at Columbus. The essentials in these three programs seemed to be:

A. Cross-faculty participation, usually including some combination of the fields of geography, history, political science, economics, psychology, sociology, and education.

B. A Methodology, combining:

1. The lecture and discussion.
2. The field trip for observation.
3. Direct community experience by students, usually leading children in a responsible social agency.
4. Specific community survey work by students — especially at Chicago and Ohio.

This work is found in the freshman and sophomore years and is considered a major, especially at Ohio. At

this school a formal course in formal sociology is a freshman prerequisite for the September off-campus survey. In the sophomore year the student in courses of educational sociology writes up his survey and continues his study of the area as a prospective teacher. Wisconsin emphasizes student committee work throughout the freshman and sophomore "area course," or major in the social studies. Certainly theory and practice can be brought together in such a program to give a student something strong to stand on. Chicago students learn urban sociology well. Wisconsin combines Milwaukee and rural life.

II. A second finding was called by Dr. Blackwell "Off-Campus Experience." This includes:

A. Field trips, already used extensively at Chicago Teachers College for the Chicago area, are extended to "long trips" by the Co-operative School for Teachers in New York City, traveling as far as West Virginia and Pittsburgh. Overnight trips are a part of the work of Alabama State Teachers College and Central Michigan College of Education. Such trips provide community contrasts, and when carefully planned as they seemed to be, enliven the social studies, science, and literature.

B. A second off-campus emphasis is the usually familiar fact-finding survey. Surveys, like taxes, seem inevitable, and also, like a tax, are good or bad, depending on what they are for. One can survey anything as we Americans ought to know. In fact, right now I am reporting on a survey of surveys.

The comprehensive setup (Chicago, Ohio, Wisconsin) presents an ideal setup for good survey work. There are preliminary courses, local field trips and discussions, time for presentation of survey methods, and adequate supervision of the survey in process. Even in cases where the investigator observed superficiality, the students reported the survey as a val-

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uable experience. I personally think it is. I require one by every Junior student in sociology concurrently with his first, and for the most groups only, semester of the work. The students state it to be the hardest job they have to do. The rest of the faculty emit a friendly growl, but the students vote unanimously that it was a good chore. In fact, they're doing another one this fall in connection with their first off-campus practice teaching. They consider that to be the best way to learn the area, its people, and its schools. Incidentally, students who know mathematics are required to use it (through the trigonometry of the population nomographs). And those who don't like mathematics learn to construct useful graphical representations by handling data. Much the same application can be made for economics and political science. I recognize a criticism in this emphasis. Is it better to have surveyed and failed than never to have surveyed at all? Sometimes one gets a lot out of a course he flunks. The question is, "Was it a good course?"

C. Volunteer work in the community is emphasized by many schools. Wayne University and Ohio State require one hundred hours of such time, and other schools are coming to this. It seems to be felt that modern education (in fact, life) has taken students out of community life, and now the schools must put them back. The question of administration and collaboration, as well as standards of work and learning, are big problems here. Some one always asks, "Is this college work?" I suppose the correct reply is "It is this type of college work." And it is growing in teacher-training institutions.

III. A third large section of community understanding is labelled "Toward Social Action." Here college groups or clubs go directly into areas to serve in some way. The Appleblossom Club in Michigan provides rural-school programs, operates a rural church, conducts a camp for

youngsters, and provides an extensive welfare department. Similar local service experience is found at Alabama State Teachers College, soil conservation at North Dakota State Teachers College, and broad rural education work at Tuskegee. It is observed that these action clubs center largely in rural areas where local needs are apparent and direct. A high degree of area understanding and student learning is obtained in this most active type of work mentioned in the study.

IV. A fourth, and last major type of activity is called by the author, "Unusual Emphases." These are old themes streamlined and pointed to play a very conscious part in creating community mindedness. Under student government, the small Vermont colleges of Goddard and Bennington are considered unusual. Committees, on which students predominated, work with faculties in preparing the content and conduct of courses. The student body operates as a unit of government, even in discipline, which is considered as a matter of learning, and student committees exert a major influence.

A concerted effort is made in several places to utilize the field of the arts in understanding local culture groups. Wisconsin emphasizes this. Tuskegee employs the drama to interpret community life and raise its level. North Dakota students have developed much good teaching material in their off-campus work in conservation.

This is, as I see it, the main content of the volume. What does it add up to?

First, a very wide, if not baffling, variety of activity, but the broad aim is the same; namely:

- (1) Factual knowledge and insight concerning social behavior.
- (2) Skill and firsthand experience in group methods.
- (3) Objectively-formed social attitudes leading to social participation.

The volume is no treatment of theory; it offers no program. It does point

out some problems and omit others, which might be considered later.

I have two reactions regarding this whole community emphasis, small as it seems to be among colleges generally:

1. It is my feeling that if a student can learn the nature of social structure and social processes and organization in a small area, he can understand not only similar areas, but his state or nation or even other nations. One doesn't have to go abroad to study totalitarianism, just come to Jersey City. (Of course, I mean democratic totalitarianism.)

2. What is the purpose of the schools if not to return more community-minded people to the communities that furnished them. Maybe one will not mind this utilitarian note, but perhaps communities recognize a good investment if it serves this purpose and are more willing to support it — I mean the schools.

Books Reviewed by the Panel

Following is publication information regarding the books reviewed by the panel speakers. Each report discussed was prepared for the Commission on Teacher Education and published by the American Council on Education, Washington, D. C.

Teacher Education in Service, by Charles E. Prall and Leslie Cushman. July, 1944.

The College and Teacher Education, by W. Earl Armstrong, Ernest V. Hollis, and Helen E. Davis. November, 1944.

Evaluation in Teacher Education, by Maurice E. Troyer and Robert Pace. May, 1944.

Toward Community Understanding, by Gordon W. Blackwell. May, 1945.

Teachers for Our Times, by the Commission on Teacher Education. January, 1944.

Evaluation in Teacher Education

William S. Gray

Dr. Gray is Dean of the College of Education at the University of Chicago. He was the third speaker on the panel discussion of the Bigelow Commission and reported on the book, EVALUATION IN TEACHER EDUCATION.

I think the way of viewing this book and all of the books of the survey is to see them in their proper perspective. In my judgment the survey represents a very important and strategic turning point in the history of teacher education in this country. In order to give its purpose, I want to take a minute or two to review very briefly about four statements in the evaluation of teacher education in this country. From the Revolutionary War to 1839 — that period was a period of beginning in which two diametrically opposed concepts of teacher education evolved. The first normal school of Massachusetts was conceived as something added to the academy education and provided in the academy. From 1840 to 1920, we had a period which may be thought of as a period of tremendous development in the concept of teacher education. There was the rapid growth of normal schools. And it was during that period that our own institution was established: the organization of such institutions, the organization of extension courses, and the organization of education departments in colleges and universities. That period was a period of groping. That period was a period in which effort was made to find a way of realizing a felt need. Now, with communications as limited as they were in those days, the character of teacher education that developed was deficient. Consequently there was a spirit of criticism

which began to arise about 1900. The period from 1910 to 1935 may be characterized as a period of investigation and criticism of the teacher-college group.

One of the outstanding surveys was the John Parker Survey of the normal schools of the country made in 1916. Following that came the work of the Carnegie Corporation in which the survey of Missouri, in the development of standards by that organization, received a great deal of emphasis. Then came the North Central Study of colleges of education. For example, they couldn't see why there should be 125 education courses for under-graduate students. In 1932 to 1935, came the National Survey. That period was a period in which effort was made to try to find out the facts and to see what could be done in improving the situation. Following that came a period of constructive effort, trying to get away from the difficulties we had encountered. We had to go back into the twenties to try to find a new basis for the organization of courses for teachers. Then came the National Association Studies, both of the South and North Central Associations, in which they delved into the problem of how those institutions could better provide for the preparation of the teacher. The study of the North Central Association on what constitutes the academic preparation of teachers showed the inquiring attitudes which prevailed. Along with that came the institutional effort to survey a large number of institutions, experimenting in an effort to find a better solution. The Teachers College of Columbia University is an example of that inquiring critical effort which

was manifested. Then came the Mount Pleasant study with the effort placed on the character-education motive, to try to develop a broad concept of teacher education. The co-operative effort of Columbia University was useful in the reorganization of curriculums.

All through the thirties there was a persistent effort to try to get to a better solution of the problem. Out of that effort came two or three conclusions. The solution lay not in the prescription of a form of training, but through the effort on the part of the members of an institution to face frankly and definitely what the institution faced and to work out a program which was adapted to the needs of that institution. And the conclusion reached was that the solution lay not in our survey but in the effort to train and stimulate staffs in institutions to attack this problem definitely and constructively.

It was with that background that the American Council Study came into being. It is logical that they should take as their cue the products of an experiment of a survey made previously. Consequently they attacked it not with the effort to define and prescribe the solution of the problem, but with the idea of stimulating constructive effort on the part of all concerned with teacher education. So I should like to place my comments in that sort of frame work. As they went into the study, they chose not all of the problems. They chose certain outstanding problems which they felt would be of maximum help to the teacher-training group of this country. They attempted to define the character of teacher needs. They gave a great deal of attention to pupil growth and development. They also recognized that the training of the teacher is a continuous process and does not close upon graduation from the institution. Community relationships have values that are lasting. They give the teacher a chance to develop a better personality by their contacts. They recognize that colleges need stimulation and guidance to approach and attack these problems.

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Then the issue of evaluation. Coming back to this issue of evaluation, the volume is based on the assumption that pupil evaluation is an integral part of all constructive efforts. This volume involves, in a sense, one of the basic aspects of this work, in which the commission was engaged in every step of its activities. In the second place it concerned evaluation in a very broad phase. It is the test of judging the effectiveness of educational experience. It is broader with measurements that can be expanded. It draws upon any source of evidence—quantitatively and qualitatively. The discussions provided a much better expression of classification of a basic educational concept. In the third place, in the relationships of staffs are certain fundamental and very broad perspectives. Tasks, procedures, and techniques are the following:

1. Clear definition of objectives toward which an institution, college, or any aspect of teacher education is directed.

2. Description of the specific bases implied by the objectives. I think one of the very valuable influences of the report will be the modification in the statement of objectives of teacher education.

3. Identification of those types of situations which can be used for evaluation.

4. Development of ways and means of getting evidence. We have a variety of sources from which evidence can be drawn. And rightly, in conclusion, they summarized these steps and emphasized the importance of summarizing and integrating a variety of different types of evidence. In addition to defining evaluation very broadly, they have mapped out and clarified, so far as our thinking is concerned, the basic and essential steps that are involved in education.

Evaluation is a developmental process that begins at the time students go into an institution and extends all through the stages of his development. It begins with student selection through the orientation and guidance

and is concerned with the products of education, with student teaching, with the follow-up the institution does, and concludes at the in-service level. The book is organized in the various types of areas in which evaluation is to function. In my judgment of this particular volume, I think the authors have been incisive in their thinking, and have, in the organization of the book, followed out the basic plans that underlay their initial analysis. The volume illustrates many fields for evaluations. Evaluation of an individual; evaluation of a single course.

The information was drawn from many types of institutions, situations, conditions, etc., to which basic conclusions have wide applications. If we were to ask ourselves if the examples were the most effective examples, we would have to disagree, but if we look at this volume as an opportunity to get stimulation and guidance and better ways of doing the job, then I would agree that the volume is a highly valuable one, because it does analyze the field in an effective fashion. It gives illustrations of the experiments that have been attempted in these various areas, and consequently gives stimulus to the leaders to want to carry on, and carry on with their own evaluation processes. The effects of evaluation are rightly on the individual and his progress, and thus becomes a part of his growth. And under guidance, according to this concept, evaluation and instruction for the student and teacher become closely related phases of the same over-all process. It is a method for broader instruction, organization, and improvement. Evaluation is in the broadest sense a co-operative enterprise. Evaluation will fail without a staff organization which permits and keeps open channels of information. The authors have done a fine job in giving a concept of what evaluation is, and have attempted to analyze it into its component parts in which appear the continuity of various phases of teacher education. I am not so favorably impressed with all of the vol-

umes. This one, fortunately, I am very enthusiastic about.

Malan . . .

(Continued from page 121)

seas, and to every land upon the globe.

This great college boasts of a past that is secure. Its present is secure, but what about the future. The world after the war is going to require, not only a multiplicity of technical experts, but also an even greater number and variety of men whose minds are trained to achieve wisdom. We believe that Indiana State Teachers College will make its contribution to both of these demands and endeavors.

In the shaping of a mind, nothing is more useful than the study of the past, not as the past, but rather as the cause and explanation and root of the present and the future. This training can not be easily given secondhand from textbooks, but must be given through direct contact with energetic persons with large vision, powerful minds, and choice spirits. The influence of an institution is not measured by its material facilities, such as buildings, stone or granite, but it is measured by the caliber of the men and the women who serve on the faculty, and by their quality of soul and learning. Wholesome people are the ones to guide the destinies of youth. Indiana State Teachers College will continue to assume that responsibility. High standards will always be found among the faculty of this institution.

Nothing that I can say, my friends, would add to the luster of the people of this great institution. Nothing that I can say would add to the course and direction which this great institution will take in the future, because its course is clearly charted and its leadership is worthy.

When another seventy-five years will have rolled by and an appraisal will again be taken on an occasion such as this, again the testimony of all must be, "well done, thou good and faithful servant."

The College and Teacher Education

Grady Gammage

Dr. Gammage is the president of both the Arizona State Teachers College at Tempe and the American Association of Teachers Colleges. THE COLLEGE AND TEACHER EDUCATION was his report.

That part of the report of the Commission on Teacher Education entitled, "The College and Teacher Education" presents what happened in the colleges in their work with the Commission.

Many specific activities are described and analyzed. Very helpful interpretations are made and conclusions reached. While varied activities in many different institutions are treated, it is interesting and extremely significant that in almost every case the interrelatedness of all aspects of teacher education became evident. It was demonstrated repeatedly that the probing of one phase of the over-all problem threw light on other phases and that integration, understanding, and working together of everyone became more and more apparent as the studies proceeded.

It probably would be incorrect to say no new truth was discovered in the several experiments described in this report. On the other hand, it would be grossly unfair to gauge the report on the basis of its presentation of hitherto unrevealed truth.

The basic purpose of these experiments was not to make new discoveries of facts, but, if possible, to lessen the gap between theory and practice. Many theories of education have gained great validity not because of actual demonstration, but because of careful study and because of their basic reasonableness. Practice has lagged far behind advanced educa-

tional theory in almost every phase of teacher education. Teacher-education institutions have too often been unaware of the nature of the jobs their graduates were called upon to fill. As demonstrated in these experiments, many, if not most faculty members, are unaware of the reconstruction going on and already accomplished in the public schools in response to changing social and economic conditions.

The co-operative college studies reported by the Commission responded in admirable fashion to the challenge of an earlier report in which the "utmost in ingenious collaboration" was called for. Implementation of theory rather than research or controlled experimentation was the program decided upon. Actual demonstration in life situations is what was done in these institutions.

The number and types of institutions participating in this study were as follows: six universities, five liberal arts colleges, seven state teachers colleges, and two Negro colleges. This list includes almost all, if not all, types and sizes of institutions preparing teachers.

The earlier report on "Major Issues" helped to bring the problems to the surface; the Bennington Conference helped to set the stage and perhaps to suggest a pattern of activity. However, the significance of the whole report will be missed if we gain the impression that the issues studied were imposed from the outside or by some authority from within these several institutions. Each institution developed its own issues.

As might be expected in the early stages of a number of these studies,

there was confusion and doubtless some discouragement and feeling of futility. In the report, sufficient description is given of the project at each institution to convey to the reader something of the difficulties involved, the temper of the situation, the effect on the local program, and the interpretation of the chief outcomes.

PERSONNEL

The first part of the report on "The College and Teacher Education" begins with the entrance of the prospective teacher to the college campus, his orientation, and the shaping of his subsequent program through college. Then the fields of general education, major specialization, professional education, including practice teaching, are covered. The emphases revealed in the programs described in the above areas are discussed in Chapter VI of the report.

In this section of the report, the personnel point of view is emphasized. This viewpoint includes all phases of an individual's personality. In college it means that each student is regarded as a complex organism and that all resources of the institution should be brought to bear on his best development. Since the student is to be regarded as a totality, the personnel program naturally will tend to merge with the educational aims of the whole college. This is the basis for the belief that all faculty members must co-operate if the personnel program is to be effective. When one thinks of the range of viewpoints in his own college faculty from those who regard students as intellectual entities and nothing more to those who see them as evolving personalities, he can see it is no easy task to get an entire faculty to share the personnel point of view. Yet if this hurdle can be negotiated a great stride forward has been made.

Another major problem encountered was the distribution of responsibility for various phases of the personnel program. Apparently the most acceptable division of labor found was that the major portion of the counseling program should be carried

by the faculty and that the personnel staff could best serve in facilitating this process. Hence much of the effort of the personnel staff would go into assisting members of the faculty and in making them aware of the place and importance of this phase of work in the total educational program.

In a brief summary of this nature, it is quite impossible to give a description of the events and the thinking leading up to conclusions and outcomes. This, I hope, will explain certain categorical and perhaps unfair statements here presented. The following are some of the recurring characteristics and emphases in the Commission report on student personnel, general education, special subject matter, and professional preparation.

1. Very few of the institutions included in the report accomplished a complete revision of their teacher education programs. In all the institutions, the effect was felt in other phases of the program than the ones studied. There were similar elements in all studies.

2. Each of the institutions selected some phase of teacher education felt by its faculty to be important to that institution. Experience seemed to indicate that the particular point of beginning is not nearly so important as the fact that one *does begin*. This, of course, emphasizes rather than minimizes the importance of preliminary thought and planning.

3. Each institution needed to develop a frame of reference in terms of its own environment. This involved institutional purposes, composition of faculty, interests and social backgrounds of students, and the jobs teachers actually do in public schools.

4. The experience of the teachers colleges in their study of general education demonstrated the desirability of concentrated or spearhead attack on problems as contrasted with the concerted, all-out attack in every direction. There was a high mortality rate among committees set up to study all or many phases of teacher education. On the other hand, the concentrated

approach expanded horizons far beyond the immediate surface of the point of concentration.

5. It was found that it is vital that lines of communication be frequently used and kept open between educationists and subject-matter specialists.

6. The most characteristic feature of the co-operative study was the tendency toward organic integration and the making of teacher education a single vital process. This was brought about by study groups within individual institutions combining their forces, exchanging information and by general cross-fertilization.

7. The principal emphases brought to the front in the areas thus far discussed are as follows:

- a. Practice teaching (most important).
- b. Understanding child behavior and human development — interest in living children.
- c. A working knowledge of social process or community behavior — seeing and participating in a functioning community.
- d. To a lesser extent, appreciation of art and music as important in modern life.

8. Direct experience was found to be the most important means of integration. This took the form of observation and participation, field trips, and school visits. This contact with actual situations, especially in the total program of the school and community away from the campus, was found to give steadiness of purpose and a confidence and interest difficult to acquire in any other way. These came from the necessity for understanding a working situation well enough to participate in it and not from a mere verbal process. The critical attitude of students of the content of the course because of their firsthand contacts led to teacher-student planning for the conduct of the class in this instance, and the instructor doubted if he would ever return to the teacher-planned and directed course. The widespread emphasis on direct experience at every stage of teacher prepar-

ation among these colleges was to bring student teaching into close contact with every phase of the entire program. Close integration of student teaching and other phases of the professional preparation of teachers is still a major problem. There is no one best arrangement, not any one best point for direct experience in practice teaching, but it is imperative that each institution be evolving constantly the best arrangement of which it is capable and at whatever point it thinks best.

IN-SERVICE EDUCATION

An in-service program of teacher education can't be built successfully on academic concern with community sociology nor on the desire to instruct students. Such a program may develop when:

1. College professors ask for help in developing courses for pre-service teachers and thus have inter-communication between schools and colleges.

2. College people show more than an academic interest in the welfare of the institution's service area and make an effort to help solve community problems.

3. As many staff members as possible engage in some sort of field work.

INSTITUTIONAL INTEGRATION

The Commission report states "... that the distinction so often made between individual and group development as the proper focus of education is wholly artificial. These two goals can not be separate and in conflict with each other, at least in our day and age, since they are mutually dependent. As the sphere of effective individual control of everyday life has been progressively narrowed by technical and political developments, ... group activity to counteract the restriction has become a social necessity of the first importance."

The report indicates definite shifts in the institutions toward a more democratic procedure in administration. Staff members and students began to share more in deliberations.

"There is growing feeling that it is important for one to have the experience of helping to evolve a plan before one can help to put it into operation in the most effective manner."

The report further states:

"No trend toward organic unity got started anywhere or was kept moving without active leadership."

"Progress depended in large measure on the administrator's knowledge of people, responsiveness to human values, awareness of the unfolding situation, and sense of timing."

A keen sensitiveness as to student needs is an absolute prerequisite to any effective development of group consciousness or organic unity. This can be the synthesizing influence which will subordinate departmental interests.

GENERAL CONCLUSIONS

It is the judgment of the Commission that "... rather basic reorientation is called for in typical campus thinking if colleges and universities are to succeed in educating teachers adequate to the demands of our times." Too much experimentation is ill-considered without sufficient joint thinking and group interaction. The average college faculty member will catch the vision if given a chance.

Halfhearted tinkering will not lead to reconstruction of teacher education. This will come only when there is statesmanlike leadership, and when the faculty is ready and is alert to contemporary issues of every day life. Faculty readiness will emerge from working together on program changes and from mutual acquaintance and exchange of views. The spirit in which an enterprise is undertaken is all important. Of course, the spirit can not be expected to result automatically but two devices are recommended for use:

First — "The study of the backgrounds, aptitudes, and interests of prospective teachers."

Second — "The comprehensive examination of school practice in selected communities of the state or other service area."

In pursuing these two devices, there would be constant interaction between student needs and professional demands. The studies indicated that firsthand contacts with public schools was a revelation to many faculty members. Professors unaware of their possible contribution to teacher education could adjust themselves to the preparation of teachers for a fascist state as easily as for American democracy.

Study along the two lines suggested above may easily lead to a consideration of problems found in all areas of teacher education.

Current demands on teacher competence have their roots in American life. These demands didn't originate in the schoolroom but in the everyday lives of the people. New materials and methods represent attempts at adjustment to these outside pressures.

The spirit is the essence of the enterprise. Over and over the report emphasizes that changes in curriculum or of methods and ways of doing things is a matter of the spirit. Group consciousness or organic unity is a basic imperative. This may be slow, cumbersome, and often discouraging; but the facts are that growth and changes in ways of thinking come by experience and sharing, and not by administrative fiat nor by someone submitting a finished proposal. The short-cut method may be quick, but when it is all over the change is on paper only. There is no effective substitute for working together. "The spirit maketh alive" and nothing else.

All of this requires great qualities of mind and spirit on the part of both faculty and administration; it requires keen appreciation of individual worth; it requires faith in and devotion to the democratic process; it requires an understanding of the realities involved and patience and wisdom in dealing with them.

Teachers for our times need to know their subject matter; but beyond that, they must be able to work with other teachers and with community agencies. They will also need to see the growing child, the curricu-

lum, and other things with which he deals as wholes rather than as isolated units.

For purposes of emphasis, I shall conclude this part of the statement with some generalizations presented in the Committee report:

First — Students will need to share much more actively than in the past in planning and appraising their education.

Second — Breadth of view and grasp are best attained by alternating direct experience with discussion and reading.

Third — Great emphasis should be placed on understanding the nature of human growth and motivation and social change.

Fourth — Group action will become more and more important in the future.

HOW CAN A COLLEGE MAKE EFFECTIVE USE OF THESE REPORTS?

If I sense the situation properly, the Commission has refrained deliberately from making any pronouncement as to how a college may make effective use of these reports. In this as in all other issues presented, there is not a *best* way. The spirit of these reports must take root on the local campus. The ways of doing things as exemplified in the reports will be helpful but they are no panacea unless the faculty and administration are quickened by the spirit.

I have two very pertinent statements on this matter, each made by a man who has been close to the work of the Commission. Both statements are excellent and very definite. In reading these statements, one must keep in mind the whole background and spirit of the commission's work. It would be unfair to the statements and their authors to look upon them as pronouncements.

STATEMENT No. 1¹

1. Pick out one of the institutional stories in *The College and Teacher*

¹L. D. Haskew, Executive Secretary of the Committee on Teacher Education of the American Council on Education.

Education, ask the members of a faculty group to read it carefully and critically, and then have a series of discussion based upon this reading. Out of such discussions might well come a tangible plan for undertaking some particular study in the institution concerned. The advantage of using the written description of another institution is that people will be more objective and thoughtful perhaps than if they were examining their own institution.

2. Have committees of a faculty go through the college volume and the in-service volume, each committee looking for ideas on a particular phase of the teacher-education program: for example, student guidance, community improvement, general education, and so forth. Each committee might then report its ideas to the entire group, again with the purpose of pulling out a few upon which the particular institution would like to work.

3. Suggest that the last chapter of *Teachers for Our Times* be used to establish criteria for an adequate program of teacher education, and get a faculty group to undertake the evaluation of their own program in terms of those criteria.

4. Launch an all-faculty, voluntary study of some phase of the local program. As one knows, the major contribution of the Commission was in demonstrating ways of working in such studies. A steering committee for the local study could well examine very carefully the various publications of the Commission, in order to use the best strategy for carrying forward this local study.

5. Call in consultant help from among members of the Commission's staff and others who know a great deal about its way of working to meet with an interested faculty group on the topic, "What Are the Next Steps for the Improvement of our Program?" Out of this might well come a long-term plan for study and development in the local institution.

6. Arrange for inter-visitation with other institutions — the reports upon these visits to be made to the entire faculty.

7. If there is a definite problem already defined, it might be well to organize a local workshop to deal with it. Outside consultants could be used to a large extent here.

8. Get an interested group of the faculty to begin a study of children. Capitalizing upon the guidance provided in *Helping Teachers Under-*

stand Children, to be published in July, such a group might well prove to be the real dynamics of progress in a teacher-education institution.

9. Bring more of the students in on more of the planning of the curriculum and the procedures to be followed in carrying out that curriculum.

STATEMENT No. 2²

1. Use the actual and immediate problems faced by the college as a whole and by its several policy forming committees as the basis for using either the published reports of the CTE or any of its staff as consultants.

2. As a preliminary to study, such committees should have their functions clearly demarcated and, unless otherwise specified, should be restricted to policy-making and advisory functions. Their proposals should be adopted by the faculty before they become the policy of the institutions. If necessary, personnel of the committees should be shuffled to assure real study and action rather than study to prevent action. In a fairly large institution (forty or more faculty members) there should be a college-wide steering and planning committee to co-ordinate policy proposals.

3. Policies that are adopted should be administered by the regularly constituted administrative officers of the college. Committee administration is wasteful of time and inefficient.

4. Center the attention of committees working on any aspect of teacher education on the total job of preparing the individual for his career as a teacher and a human being — thus forcing it to see its job of planning as part of a total job that must be articulated and, if possible, integrated. As an illustration — there undoubtedly would be committees working on student personnel programs, general education, areas of subject-matter specialization, and professional education including practice teaching. The CTE volumes have much to contribute to each of these committees but if they work in isolation they will come out with proposals that can not be articulated into a program. They must begin with the whole, agreeing on the number of hours, for example, to be devoted to each major part of the curriculum and then leave the

² Ernest V. Hollis, Principal Specialist in Higher Education, U. S. Office of Education and formerly of the staff of the Commission of Teacher Education.

working out of details to the committee responsible for a particular function. By the way, such committees should not be wholly of staff members responsible for the major, the education, or whatnot — balanced proposals come from having a minority of the committee from outside of say, the field in which a major is given. This is especially important in designing curricula for high-school fields.

5. The committee working on programs of further education for teachers in service should enlist participation from the field. It should make proposals for on-campus and off-campus courses, and for a type of extension work (with or without credit) in which the staff helps with day-to-day problems in the public schools. In general, the days of correspondence and extension courses are numbered. Most colleges need a more liberal and grown-up student personnel program for managing mature teachers who attend summer school.

6. Committees responsible for developing policy on faculty appointments, promotions, tenure, and welfare should not be considered as parts of a study of the college program, no matter how valuable their work may be in the administration of the institution.

So much for organization for work on "implementing" CTE ideas that may be pertinent in a given college situation. This puts implementation on a working basis rather than on the basis of organizing the faculty merely to study these reports in the fashion of a "reading circle" or book review club.

Any committee organized in the fashion suggested can go to these reports and get many helpful ideas for its work and deliberation. The experience of the CTE staff indicates that a college will get more for \$2,000 if it spends it over a year or two bringing in consultants to stimulate and work with committees, than if it spent it on the full-time service of one faculty person — if such an individual is not absolutely necessary to current operations.

Even more important than the use of such a consultant is the understanding leadership of the college president. If he is not professionally minded enough and competent enough to give leadership (not domination) to such a project as I propose — and willing to do so — the college should not undertake to use CTE ideas.

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Teachers for Our Times

Frank E. Baker

The last report of the Commission on Teacher Education to be discussed was TEACHERS FOR OUR TIMES. Dr. Baker is President of Wisconsin State Teachers College at Milwaukee.

I am torn in two directions in making this report. We're here today to magnify and glorify the education of teachers. We are using a definite report, and we are discussing this report scientifically to determine to what extent we can use this problem to improve the system of teaching. So my criticisms may be considered treason, but I am critical of this book on which I report.

I am completing my thirty-fourth year as head of a teachers institution. I am telling this because the first twenty years of that experience I had to go to meetings to hear the cry for better teachers, and I went away from them hungry for the knowledge of how to get better teachers.

When these surveys and studies were started, I was very happy about it, because I hoped that I would get some help in this problem. I was particularly happy when my institution was asked to join in this project.

Teachers for Our Times—that is a great subject, a stirring subject. The times in which we live may be so fruitful in promoting the common welfare. The thing America is engaged in now is education for leaders—that is a stirring subject. The question that rises in my mind is, has it been treated in a great way?

This book is well written. In fact, I wish it were not so well written. I wish it had some of Billy Sunday's language. The book doesn't strike fire. I realize it is unfair to value on the basis of pages, but of the hundred and seventy-five pages, thirty-one were devoted to the main topic, one hundred and sixteen pages to a side

our country, churches, children, and schools. Could not this have summarized? It seems to me, to devote one hundred and sixteen pages to a side line and only thirty-one to the subject is poor organization.

The discussion of the liberal arts colleges in Pennsylvania discloses that there has been a terrific struggle between liberal arts colleges and teachers colleges to do graduate work. A bill was introduced in the Wisconsin Legislature by the liberal arts colleges to give them authority to do graduate work. They looked upon this as a competitive thing. There is no competition in education.

About twenty years ago, I talked in support of a bill in legislature to establish a branch in Milwaukee. When I got up and talked in favor of the bill people were surprised. They asked me if I wasn't afraid that this would hurt my institution.

More education creates demand for more education. I think there should be something said in discussing this thing that would raise fire and it needs to be said plainly. We need some more of the kind of language of Winston Churchill. He uses figures of speech that make your blood stir. I think there should be some statements in this book that have something of that effect.

Another place where I found something wrong was in dealing with the workshop method. I differ with my good friend Mr. Crabb in that the workshop method is the problem method of teaching. This book does not define it. It is the problem method of education. It is the case-study method in studying law. The problem method is the workshop method, and it is effective only where one can work in means of solving problems.

One can not use it in methods. The book does not define the uses of the

workshop methods. The army uses this method extensively.

A young soldier was home on leave and I asked him what he was doing. He said he was in ordnance and was occupied in loading munition ships. "They bring the ship to the dock," he said, "and tell us to load it." He continued, "Then they call us in to discuss it."

Two weeks ago another boy who was commissioned in the Marines was getting ready to go to the Pacific and lead small squads of men. They spend eight weeks in which they simulate detailed information of the Pacific islands. Later he lead them up the mountain side with shells going over head. It was just like the shores of the islands in the Pacific. And the workshop applies very well in this instance. It applies to the education of teachers. We have to help the teachers and teach them how to solve problems.

In discussing the community relations, the book devotes considerable time to the T.V.A., but it missed the greatest point. For instance, we all know and are interested in the equality problem. One of our problems in times to come is the maintenance of equality of opportunity in education. I know some startling things can be found on that. The first step is in federal aid to education, but that is opposed on the grounds that it brings in federal control. The T.V.A. brings in distinction between control and direction. It doesn't matter where the responsibility comes from, whether it be Washington or Madison. That distinction wipes out all of that. A great deal could have been said on this.

A discussion of selection of teachers and why these teachers *must* understand children and the community life was made. They *must* understand children.

If I could be a Czar and set up criteria for teachers in today's schools, I would have an intense knowledge in human nature and the desire to promote its welfare. I think that through reports and records from high
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Teachers College Journal

The Effects of the Bigelow Commission on Teacher Education

Bess Goodykoontz

Dr. Goodykoontz, Assistant United States Commissioner of Education, closed the panel discussion by telling of the total effect of the Bigelow Commission on the field of teacher education.

One obvious fact about the teacher-education study is that this is another one of the professions studying itself — like the dental schools' study of their curriculum, like the A. M. A.'s study of its institutional standards, like the studies made by engineers and nurses of aspects of their professional training. In so doing the profession wanted to know answers to a good many large and small questions; but in the main, it was interested to see how well it is doing the job society wants done. To do that it strikes at the heart of the problem; that is, the effectiveness of the person who is responsible for helping students to learn. To learn to read, to add, to paint, to appreciate, to build, to discover, to swim, to prove — whatever the skill is, the person who is to help students to learn to do that thing is the person who stands at the very center of the profession's orbit. Schools have run without buildings. Many run almost without textbooks. Some haven't principals, janitors, or parent-teacher associations. But they don't run without teachers. The study centers most attention on her.

The Commission's study, or really the series of studies, made some important discoveries, only a few of which I will mention briefly. In the first place, it gives further support to an emerging pattern of educational research peculiarly appropriate to education as a social science. In recent decades, there has been much empha-

sis on education as a science. Much of our educational research has used research methods earlier developed by and possibly more appropriate to the physical sciences. There has been the dissecting technique, using elaborate questionnaires calculated to discover status, direction and rate of change, mass opinion, and many other things. There has been scientific experimentation, of which the paired-group or paired-class technique is typical, involving at least preliminary and final measurement. Instead of either of these techniques, several of the Commission's studies used developmental centers or observation spots in which some particular process was to be tried out. The Commission's representatives, together with the local staff, looked over the situation, determined what developments were desirable and what processes they could use to achieve them, helped set the machinery ticking, and then watched critically to see what happened. This is obviously not air-tight experimentation, but education is not an exact science. This technique of critical observation and evaluation of a process at work in fairly isolated, fairly objective situations is probably as safe and as productive a method of educational experimentation as is possible when human beings are involved. This is, I think, an important contribution of the study — the contribution it makes to the development of an acceptable, appropriate method of educational research through the use of isolated observation areas. This technique is being used more and more. The Office of Education's study of curriculum planning on Inter-American educational problems in thirty se-

lected demonstration centers is another instance.

The Teacher Education Commission made a lasting impression also in the things it chose to emphasize as critical in teacher education. In so doing, it enlarged the breadth of vision of many persons who may have thought of teacher education as presenting a mere bag of instructional tricks to undereducated persons. Preparation of teachers has revolved traditionally around questions of content and method. The formula has been to learn a lot about something and then learn how to teach it. The Commission took another look at the problem and came up with a different idea — that the two persons in the educative process, the teacher and the student, are worth knowing. Accordingly, the Commission undertook basic studies calculated to find out what kinds of persons these are; what motivates them; what influences them; what retards, accelerates, interests, impresses, and defeats them. They looked at these two persons, the student and the teacher, in relation to the job each had to do and their effect upon each other; they tried to find out situations and safeguards, and what preparation helped each one to do his part better. The teacher as a person intrigued them. They found her to be fairly young, female, single, away from home, and earning her first money. They found that she had lived a fairly monastic life. At the age of six, she entered school and stayed there for at least 16 years, fairly protected from the harsh contacts of life and fairly restricted in her opportunities to participate in it. But one day, almost all at once, she graduates, gets a job, and becomes a community leader. That she doesn't fail more often is the marvel. What the colleges can do during pre-service training and what the schools and colleges can do in the later in-service training to help this person to a maturity of experience and outlook somewhat more fitted to the obligations she assumes is the burden of the Commission's reports. They lead to a

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Abstracts of Unpublished Masters' Theses

Indiana State Teachers College 1944-1945

Each July issue of the JOURNAL features the report of Masters' theses completed during the year.

BROLLIER, RICHARD A. *An Occupational Survey of Jasper, Indiana*. 33 pp. (No. 515).

PROBLEM. It was the purpose of this study (1) to determine the general industrial personnel of Jasper, Indiana; (2) to determine whether the present course of study in industrial education is adequate; if not, what courses should be stressed and what courses added or dropped best to meet the demands of industry and the community; (3) to determine whether girls should be given training in industrial education; and (4) to determine whether there is a need for a vocational education program in the high school of Jasper, Indiana.

METHOD. The survey method was used in the study. An occupational survey form was developed and presented to the proper authorities of all industrial concerns. The data obtained from the occupational survey form were classified according to training requirements.

FINDINGS. Women will not be hired in the woodworking factories after World War II. Women seeking factory work will be able to work only in the local glove factory. Therefore, no immediate provision should be made to give the girls in the high school industrial training in the industrial arts department.

The present industrial arts curriculum does not entirely satisfy the needs of the community of Jasper, Indiana.

A vocational educational program is needed to train the students for the

many varied occupations existing in the woodworking factories.

Future student enrollment warrants a broadening of the industrial education curriculum. It has also been indicated strongly that a very high percentage of the high-school graduates remain in Jasper after high-school graduation.

There are available room and finances for an enlarged industrial training program in this community.

Of the population surveyed, 78.09 per cent are employed in the woodworking factories.

BEDWELL, FRIEDA F. *A Study in the Background Scenes in the Life of John Milton*. 80 pp. (No. 516).

PROBLEM. This study was undertaken to determine the causes directly responsible for the tragic unhappiness in John Milton's life; and to determine the effects of this unhappiness upon his work. The survey was based on the following questions: Was Milton, himself, to blame? Were his daughters chiefly responsible? Was blindness the direct cause? Was political and domestic strife the reason?

METHOD. Histories of seventeenth-century England were read; books and articles concerning John Milton were studied; and the works of Milton were carefully examined.

FINDINGS. John Milton was by nature sensitive, proud, and egotistical. He recoiled at life's blows, and he was not trained to meet them. Blindness was a severe trial. For years it thwarted his ambitions and handicapped him at every turn. He became a bitter man — "a soul driven by despair beyond despair." His daughters were unkind and undutiful. They

considered him a tyrannical, ill-tempered parent, whose demands were unreasonable. He, in turn, was deeply hurt by their attitude, and grew sterner and more unyielding as years went on. Father and daughters were never able to meet on any common ground of understanding. John Milton's first marriage was a shock to his pride and ideals. He never quite recovered from the blow. He lost faith in woman, and he lost some faith in himself. His work with the Commonwealth kept his life in conflict, and increased the antagonistic attitude he had toward the world.

Neither Milton nor his daughters ever fully understood in what way they were to blame for their many years of unhappiness. Milton was a typical Puritan father. He believed that man was meant to rule; woman to obey. He considered that, when he discharged his duties as father, he had done all that was essential to the welfare of his children. He never looked upon his daughters as individuals, but judged them solely by his own standards. He failed to take into account the fact that they were the daughters of Mary Powell and had inherited many of her characteristics. The daughters, in turn, failed to realize the difficulties of their father's life. Instead of feeling pity for his blindness, they felt resentment because it imposed tasks upon them which they did not like. The situation did not make for harmony in the home and robbed them of companionship. Milton expresses this life of sorrow and conflict in his works. It is particularly evident in *Samson Agonistes* and in *Paradise Lost*.

SISTER MARY ROBERTA. *An Analysis of One Hundred Elementary School Readers to Show the Influence of Changing Objectives*. 92 pp. (No. 517).

PROBLEM. The aspects of American reading instruction have changed much since Colonial days. Educators have listed six periods of emphasis in this field, (1) the religious emphasis period, (2) the nationalistic-moralistic emphasis period, (3) the German

Pestalozzian-principles emphasis period, (4) the cultural asset emphasis period, (5) the utilitarian asset emphasis period, and (6) the period of emphasis on broadened objectives.

This study has attempted to cover the last three of these periods. The purpose of this analysis of readers was (1) to show the trend of reading instruction in the United States from a few basic objectives to a broader, enriched conception of the purposes of reading; and, (2) by an analysis of a number of readers representing the three periods from 1880 until the present, to show the changes in content, methods of teaching, instructional aids, and the mechanical features which reflect the changes in objectives.

METHOD. One hundred readers were used for the analysis. The plan was to use the first three readers of as many series as obtainable for the first and second periods and the first three books of several series of the present period.

Due to the difficulty of obtaining copies of the three books of series published between 1880-1918, the number of books for this period was limited to 35. Nine series of three books and four series of two books were used.

The rather brief 1918-1925 period was represented by seven series of readers of three books and one series of two books. Six of the sets for this period were the ones listed by Harris, Donovan, and Alexander in *The Supervision and Teaching of Reading* as good for drill in silent reading. The total number of books used was 25.

Fourteen series of readers published between 1928 and 1942 were used for the present period of broadened objectives. Four series were published between 1928 and 1933 and ten series between 1939 and 1942. The number of books used was 42.

FINDINGS. Results of the analysis were tabulated in twelve tables. The study showed that, in regard to a statement of objectives of the reading program, the progress was steady

from no statement in the 1880-1918 period up to an almost universal statement in the present period.

Methods of teaching reading have swung away, during the years covered by this study, from synthetic methods to analytic and then to eclectic methods.

The provision of instructional aids was studied from the texts and their accompanying directions or manuals. In the first period, slightly over one third of the books provided no aids; by the end of the middle period, almost one half of the books could boast of some form of teachers' manual; the present period was found to be well provided with many kinds of aids in well prepared teachers' manuals and other devices.

The study of illustrations showed that somewhat over one third of the illustrations in the readers of the 1880-1918 period were colored; over nine tenths of them were colored during the 1918-1925 period and the present period. The authenticity (here taken to mean that the illustration checked with the facts related in the story) was high for all three periods. One half of the pictures were boxed in during the first period; practically nine tenths received that treatment during the middle period; and less than one fourth were boxed in during the present period. The free illustration has gained a permanent place in reading texts. The study also revealed that few illustrations are so placed as to interfere with correct eye improvement.

A study of the mechanical features of these texts showed that the rather generally used type size of print moved progressively toward 18-point in the first grade, toward 14-point type in the second grade, and from 12-point in the 1880-1918 period back to 14-point in the present period. The trend was from lightface type in the first period to standard in the second, and standard and some boldface in the third period. Paper was white and without gloss in all cases. Wide space between lines was found much more common today than in earlier

times. Bindings and covers of the readers have been made more durable and more pleasing to the eyes of children.

The story content of the lessons in the one hundred readers was analyzed under thirteen headings. It would be impossible in a brief summary to show all the changes in rank of the different interest fields. These may be suggested by saying that there has been evidence of a strong tendency to socialize reading materials, presenting stories which deal with significant experiences in the lives of children. However, even the newest and the best basal readers were still found to carry many riddles, rhymes, and fanciful tales.

The changes in reading texts during the past sixty years show that, though textbooks do definitely lag behind the teaching theory of a given period, the changes in the texts have contributed to the realization of the enlarged objectives of the reading program.

LARR, ALFRED L. *A County Speech and Hearing Conservation Program*. 69 pp. (No. 518).

PROBLEM. This study had the general purpose of outlining the methods and procedures followed, and of presenting statistical treatment of data involved in administering speech correction and hearing conservation in a county school system. Data were compiled for three aspects of the program: first, a speech survey of the 36 schools of Vigo County; second, group and individual audiometric tests of all the pupils in the county schools; and, third, teacher prediction of hearing defects.

METHOD. The procedures followed in the first year (1941-1942) of the Vigo County Speech and Hearing Conservation Program were outlined, analyzed, and criticized. Successful methods were noted and changes were suggested where improvement seemed to be needed.

The speech survey consisted of speech tests given to 345 pupils in the 36 schools of Vigo County who

were suspected by classroom teachers of having speech defects. Group hearing tests were given to all of the pupils in Vigo County. Individual audiometer tests were given to all pupils who scored a hearing loss of 9 decibels or greater in one or both ears. One hundred sixty teachers submitted lists of children who were suspected of having a hearing defect. The children were given hearing tests and the results were compared with teacher predictions.

FINDINGS. The speech test was given to 345 pupils. The clinician-tester classified 321 of them as speech defectives. A total of 2543 errors were made by the 321 pupils. The ten most difficult sounds as indicated by the number of errors were: *Wh*, *Th* (voiced), *S*, *Z*, *Dzh*, *R*, *Th* (unvoiced), *L*, *Ch*, and *Sh*, in that order.

Hearing tests were administered to 6187 students in Vigo County. Group and individual tests showed 513 pupils (8.4 per cent of the pupils tested) had an average hearing loss of 9 decibels or more in one or both ears.

Two hundred one pupils in grades one through six were listed by their teachers as hearing defectives. Twenty-eight per cent of them had a 9 decibels or greater average hearing loss in both ears. Sixty-three per cent of the group showed a 9 decibels or greater average hearing loss in one ear. An average hearing loss of plus 3 or minus 3 decibels, which is normal or superior hearing acuity, was scored by 23 per cent of the group.

In the 160 classrooms studied, on the other hand, 298 pupils scored a 9 decibels or greater average hearing loss in one or both ears. Only 57 (19 per cent of the 298 defective pupils) had been correctly predicted by their teachers. The implication of the study of teacher prediction of hearing defects is that, without the use of audiometers, teachers in grades one through six tend to observe the existence of an 18 decibels or greater average hearing loss in both ears, but do not readily observe slighter hearing losses in one or both ears.

LADUKE, DAVID LEON. *A Study of Non Promotion in the First Eight Grades in Sullivan County from 1932 to 1940*. 55 pp. (No. 519).

PROBLEM. The purpose of this study was (1) to compare failures of boys with failures of girls; (2) to compare failures over various years; (3) to discover in what grades those who failed once failed again; and (4) to compare failures in the eight- and the nine-month schools of the county.

METHOD. The investigator visited each school and examined all the records available. A card was made for each child who failed once or more in the scope of the study. On that card was indicated each failure for the child and in what grade and year such failure occurred.

The cards were then sorted into groups according to grade, year, length of school term, and sex of the person indicated on the card. The results obtained from counting cards in various groups were tabulated.

FINDINGS. Of all grades the first grade was found to be the most likely spot for failure to occur while the eighth grade was the least likely place.

The second most likely place for failure to occur was the second grade in the nine-month schools and the sixth grade in the eight-month schools.

Boys' failures exceeded girls' failures in almost every grade and in almost every year in both the eight- and nine-month schools.

Grades seemed to be hard or easy to boys and girls alike. That is, the grades where boys' failures were low were the grades where girls' failures were low and vice versa.

Repeaters were more likely to have failed in the first grade than in any other grade.

The lowest percentage of failures in any one year was found in 1938 in the nine-month schools.

The highest percentage of failures in any one year was found in 1934 in the eight-month schools.

There was more variation in percentages of failures from year to year in the eight-month than in the nine-month schools.

Boys were more likely to become repeaters than girls. Most of the repeaters failed a second or third time within three grades of the first failure.

EDWARDS, ELSIE M. *Educational Needs of Hard-of-Hearing Children in the Public Schools of Indiana*. 96 pp. (No. 520).

PROBLEM. The purpose of this study was (1) to present the results of the hearing testing and consultant service as provided by Indiana State Teachers College for 1944-45, (2) to present recommendations in cases of impaired hearing, (3) to present a study of one school system as representative of the other schools, (4) to make recommendations for improving the present hearing conservation program in Indiana.

METHOD. The survey method was followed in this study. Hearing tests were administered to 10,122 children in fifteen school corporations. Questionnaires were used in obtaining data in the study of the one school system.

FINDINGS. Of the 10,172 children tested in the survey, 512 were found to have impaired hearing. This was 5.3 per cent of the school population that had losses ranging from very slight to severe. In the one school system, 76 children were studied who were hard of hearing.

Of the 542 children who were found with impaired hearing, 521 were recommended for medical treatment, 519 for special seating in the classroom, 224 for lip reading, 81 for speech correction, 24 for hearing aids, 11 for special schools, and 15 for definite psychological adjustment.

Recommendations were made for a state-wide hearing conservation program, annual testing of children, medical and educational follow-up, and vocational training for all handicapped children.

MILES, VICTOR P. *An Investigation to Discover a Better Than Normal Way to Teach Reading in a Fifth-Grade History Class*. 58 pp. (No. 521).

PROBLEM. The purpose of this study was to determine whether or not a carefully planned instructional program in a fifth-grade history class would increase both reading and social studies achievement more than normally could be expected.

METHOD. The data were collected from twenty-seven fifth-grade pupils of the Maple Avenue School which is located at Thirty-second Street and Maple Avenue, Terre Haute, Indiana. The plan of procedure was to give one form of the Stanford Achievement Test at the beginning of the study and then six months later to give another form of the same test in order to measure the progress made during the instructional period. The program of instruction included testing, using the Morrison Plan of teaching, meeting individual needs of the pupils, developing reading skills, and providing time and material for free reading.

FINDINGS. According to the Otis Group Intelligence Scale, the median intelligence quotient of the class was 98, with six pupils having an intelligence quotient of 86 or less. The reading achievement of the class increased from a median grade equivalent of 4.45 on Form E of the Stanford Achievement Test to a median equivalent of 5.05 on Form F of the same test. This is equivalent to a gain of 6 months. There was an increase from a median grade equivalent of 4.2 on Form E of the social studies part of the Stanford Achievement Test to a median grade equivalent of 5.45 on Form F of the same test. This is equivalent to gain of 12.5 months. The median number of supplementary books read was 10. There was found to be a $.00 \pm .51$ correlation between the number of books read and the gain made on the reading test. A correlation of $.44 \pm .11$ was found between social studies gain and number of books read. A correlation of $.70 \pm .07$ was found between the reading

gain and intelligence quotients of the pupils. Very high reliability coefficients were found for the Stanford Achievement Test in case of both reading and social studies.

An analysis of the data justified the following conclusions:

1. The total procedure for teaching reading in connection with history seems to have been effective because normal gains had been made by a class that was below standard in reading.

2. The social studies achievement was improved greatly as a result of the total procedure.

Crabb . . .

(Continued from page 127)

can help each other. Of course they can. And they can extend the range of improvement to include their administrative officers. They can help each other's understanding. They can discover mutually a professional self respect that singly they would miss. Together they can vision far more clearly the dignity of teaching. Together they can reach a freedom that alone they could see but in dim prospect. Working together they can and do free themselves of old and aggressive rigidities. Gone are the days when the superintendent can, as a sign of modernity, consult his watch and affirm with professional pride, "At this moment every seventh-grade child in my system is studying the Battle of King's Mountain." This book is the record of teachers working together, helping each other, adding to their professional stature and to the richness of the lives of the children they teach.

But I must take one more fling at fault finding. The Rabbi last night used four of our noblest words — *beauty, culture, dignity, wisdom*. Why may not they point to the four quarters of a teacher's life? This book suggests no concern for two of them, or else assumes them to lie without its scope. I have yet to hear of a teacher stirred by the workshop to read Tolstoy's *War and Peace*, or Freeman's *Life of Lee*, or *Richard the*

Second, or Abt Vogler, or the *Book of Job*. I have never known one aroused to some interest in the contributions of Periclean Greece to the beauty of the world. Schubert's "Unfinished Symphony" has found no favor in the workshop. It may be that I have missed the point. It may be that the workshop, whose mother was child psychology and whose father the social studies, would in common nature find more kinship with Beveridge's four words also quoted last night. But the landmarks of culture, some ancient, some medieval, some indeed modern, still offer their complement to the vitality of life.

I am grateful for this book. It is a record of improvement. It is almost morbidly modest in its restraint. It is of major current significance in the profession of teaching. I have not interpreted it fully, perhaps not fairly, but I am grateful for it. For instance, I offer it my thanks for the opportunity to visit this great college on one of its great days.

Gammage . . .

(Continued from page 135)

What I propose is a slow, hard, and non-spectacular way of working but it will get more results — with or without CTE ideas and experiences — than any other type of effort that I know about. Paper reforms can be made other ways but genuine change requires modification in the thinking of the faculty and this can come about only through a study of the **WHOLE** problem of preparing teachers to give breadth and perspective for the sector of the job which each individual is immediately responsible.

CORRECTION

The May issue stated that Juanita Stutz Hunter taught last winter in Clinton, Indiana, and that Charles Seville taught in Rosedale, Indiana. Recent information makes it necessary for us to correct both statements.

Mrs. Hunter taught in St. Bernice, Indiana, and Mr. Seville taught in Athens, Wisconsin.

Baker . . .

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schools, we can get information from persons having an interest in this field of human nature and the desire to promote its welfare.

I was disappointed in the public educational profession of teaching which is in our control on the Gold Coast of Milwaukee. We don't get the upper class or even the middle class. I was talking to a boy who is interested in teaching, and later to his father. His father informed me that he would have none of his children in the teaching profession. I got a strong picture from Middletown. Twenty years later some teachers endeavored to do something about it. Some strong things could have been said about it in this book. What we are concerned with is what will be the outcome of this study. What will be the outcome of it and how far will it go?

For instance, what can we learn from it that will help us in the future study of education of teachers? I have a very strong opinion that the people were chosen on the staff that knew little about the education of teachers. There were one hundred and three teachers colleges and they had not one representative. They apparently thought we had gone to seed and didn't know much about it. They obviously wanted people who had little to do with educating teachers. One old salt said that a million dollars was a lot of money to educate a staff.

I think there is another thing that we need to take account of and that is that this study tried to do many things. I think it tried to touch a whole program of education of teachers wherever it was, and I think it tried too many things. I feel very strongly that they should have taken fewer issues; such as theory and practice and general education of teachers, but I wonder.

I have a feeling that if the committee had taken a few issues of importance — not more than four — even if they did get to put less out, and devoted their time to improving these

issues, they would have reached a more profitable outcome.

Now we are in the midst of war, and there is nothing in this program about the necessity and pressing need of education.

The Army has given thought to the education of the worthy young people in times of peace. Thomas Jefferson said in the Virginia Plan that "It is not unreasonable that every boy and girl should be educated to his full desire at the expense of society." We have done much in elementary and secondary schools, but we have done nothing for the higher learning.

The Army has spent millions of dollars on education in time of war. Isn't it just as important that we do it in times of peace?

Should not worthy people be educated at social expense? We should not miss our great opportunity. I should like in this report, therefore, that some startling things should be said of that need and other things. I hesitate, as I said, to criticize this booklet, as it may almost be considered treason, but I was asked to say what I thought, and I have.

Goodykoontz . . .

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recommendation for alternation of experience and study which sets a goal for some years to come.

Another problem faced by the Commission is that of the general versus the specialized functions of the teaching staff. Properly we all think of the curriculum for teachers as broad, liberal, and general in character. She is to be an educated person, competent to teach, not needing the protections of training and certification in a narrow specialized field. But this trend runs head on into another one going in the opposite direction. To carry on its expanded functions and provide adequately for its extended curriculum, the school of today needs many persons to serve specialized functions — the school librarian, school nurse, school social worker, school dietitian, school doctor, school recreation leader, school coun-

selor, and others. To a considerable degree the success of the classroom teacher depends upon the presence of such specialized helpers, and the competence of such persons depends upon a blend of training drawn from the curriculums of at least two professional fields — education and librarianship, education and medicine, education and social work, and so on. The payrolls of today's schools are not limited to the superintendent, the teachers, and the janitors as was true of those of a generation ago. They also include a wide variety of hybrid jobs, for a number of which there are not yet adequate analyses and training programs developed. The commission's study has left us with some of those problems.

Finally, the Teacher Education Commission will live long in the contribution it makes to the philosophy and practices of evaluation. It develops five steps in evaluation interestingly reminiscent of Dewey's steps in thinking. For example, the fourth step is "to develop methods for getting the evidence we want"; the last one is "to interpret the results in the light of objectives." The evaluation staff of the Commission, working directly with many of the individual projects sponsored by the Commission, made a lasting contribution in showing the practical application of evaluative techniques to the everyday school situation, complicated as it is by live material. If it does no more than popularize the idea of evaluating the purposes before the product, it will have done enough.

Illustrious Alumni

BUTLER LAUGHLIN

Indiana State is proud of its list of alumni who have become presidents of institutions of higher learning. Butler Laughlin was a member of the class of 1910 and has since received degrees from Indiana University and the University of Chicago. After teaching in the public elementary and high schools of Chicago and the Chicago Normal College, he became president of the Chicago Normal College in 1928.

Teachers College Journal

Illustrious Alumni

WALTER PIETY MORGAN

Now retired after a long career as president of Western Illinois State Teachers College as Macomb, is Walter Piety Morgan who graduated from Indiana State with the class of 1895. He received the degree of A. B. from Indiana University in 1900 and Ph. M. from the University of Chicago. Miami (Ohio) conferred an honorary D. Ed. on him in 1926. His long career in education began with a position as a high-school department head in Terre Haute, followed in turn by an instructorship at State, and the city superintendency in Terre Haute. Later, he taught in secondary schools in the city of Chicago and from there in 1912, went to Macomb to assume the presidency of Western State. For four years he served as secretary of the American Association of Teachers Colleges and was the president of the North Central Association of Colleges and Secondary Schools for one year. His publications deal with growth and attendance in state normal schools. He has also written manuals for use in the study of arithmetic.

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